

Swimming Pools and Spas

Administrative Rules of Montana

Title 16, Chapter 10, Subchapter 15

16.10.1501 PURPOSE-APPLICABILITY (1) This subchapter defines swimming pools and spas; establishes minimum standards for the construction, maintenance and operation of swimming pools and spas and associated facilities; regulates the inspection of such facilities, and provides for the enforcement of this subchapter.

(2) The intent of these rules is to assure a safe and sanitary environment in and around the public swimming pool and spa.

(3) All swimming pools or spas constructed after June 28, 1985, must be constructed in accordance with the requirements of this subchapter. Any swimming pool or spa in existence and in operation as of June 28, 1985, must comply with the requirements of ARM 16.10.1513 and must, as to any aspect of the pool or spa which is remodeled after June 28, 1985, conform to the requirements of this subchapter in effect at the time of the remodeling, provided that hot springs pools shall comply with the requirements of ARM 16.10.1527. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-106, 50-53-107, 50-53-108, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1502 DEFINITIONS In addition to the definitions in 50-53-102, MCA, the following definitions apply to this subchapter:

(1) "Backwash" means the process of thoroughly cleansing the filter media and/or elements by reverse water flow.

(2) "Bather" means any person using a swimming pool, spa or adjoining deck area for the purpose of water sports, therapy, swimming, sunbathing or related activities.

(3) "Decks" means those areas immediately surrounding and adjoining the pool which are specifically constructed or installed for use by bathers.

(4) "Deep areas" means the portions of the pool having water depths of 5 feet or more.

(5) "Filter" means a device that separates solid particles from water by recirculating them through a porous substance.

(6) "Floor" means those portions of the interior pool surface having a slope of no more than 45° from horizontal.

(7) "Flow-through hot springs pool" means a hot springs pool in which the water is continually flowing and in which the water volume exchange is sufficient to produce a turnover of the entire volume of pool water to waste every 8 hours.

(8) "Hot springs pool" means an indoor or outdoor structure or basin containing an artificial body of naturally

hot water, which is intended for swimming, soaking or recreational bathing. The term, as used in these rules, includes but is not limited to hot springs spas, hot springs swimming pools and hot springs wading pools.

(9) "Lap pool" means any indoor or outdoor pool with a minimum depth exceeding 3 feet 6 inches and a maximum depth not exceeding 5 feet with a minimum length of 40 feet.

(10) "Oxidation reduction potential (ORP)" means measurement of the oxidizing properties of any sanitizer being used in a pool or spa and is measured in millivolts (mV) by an ORP meter.

(11) "Person" means a person, firm, partnership, corporation, organization, health or fitness club, the state or any political subdivision of the state of Montana.

(12) "Regulatory authority" means the department of public health and human services or local boards of health and their authorized representatives.

(13) "Saturation index" means a mathematical calculation, based on the interrelation of temperature, calcium hardness, total alkalinity and ph, that predicts if the pool water is corrosive, scale-forming or neutral.

(14) "Shallow area" means any portion of the pool where the water depth ranges from three feet to five feet.

(15) "Spa" means a unit designed for recreational bathing or therapeutic use which is not drained, cleaned or refilled for individual use. It may include, but not be limited to, hydrojet circulation, hot water, cold water, air induction bubbles, or any combination thereof. Industry terminology for a spa includes, but is not limited to, therapeutic pool, hydrotherapy pool, whirlpool, hot tub, or jacuzzi. A spa is included as either a public swimming pool or a privately owned public swimming pool, as defined in (17)(a) and (b) and includes a hot springs spa, for the purposes of this subchapter.

(16) "Superchlorination" means the rapid addition of a high dose of chlorine to swimming pool or spa waters for the purpose of eliminating combined chlorine levels.

(17) "Swimming pool" or "pool" means any indoor or outdoor structure, basin, chamber, or tank containing an artificial body of water intended for swimming, diving or recreational bathing having a water depth of 2 feet or more in any portion. For purposes of this subchapter, a "swimming pool" or "pool" is either:

(a) "Privately owned public swimming pool or spa" meaning any swimming pool or spa operated in conjunction with lodging facilities, (such as motels, hotels, campgrounds, apartments, and condominiums that are rented or leased), health or athletic clubs, or any other non-governmentally owned swimming or bathing facility; or

(b) "Public swimming pool or spa" meaning any swimming pool or spa operated by a person as owner, licensee, lessee, or concessionaire, whether or not a fee is charged. As stated in 50-53-101, MCA, the term "public swimming pool or spa" does not

include swimming pools or spas located on private property used for swimming, bathing, or other recreational activities only by the homeowner, members of the homeowner's family, or their invited guests; or medicinal hot water baths for individual use. Any person who is charged money or other consideration to use the pool is not an invited guest for the purposes of this definition.

(18) "Turnover" means the period of time, usually expressed in hours, required to circulate a volume of water equal to the spa capacity.

(19) "Wading pool" means a pool in which the water depth is less than two feet.

(20) "Walls" means the interior pool wall surfaces with slope of no more than 45° from vertical.

(21) "Waterline" means:

(a) the middle point of the operating range of the skimmer system if the pool is so equipped; or

(b) the height of the overflow rim. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-106, 50-53-107 and 50-13-115, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1503 REVIEW OF PLANS (1) Whenever a swimming pool, spa, or related facility is constructed, remodeled, or altered, plans and specifications for such construction, remodeling or alteration shall be submitted to the regulatory authority for review and approval before construction, alteration or remodeling is initiated.

(a) All swimming pools and spas must be designed and constructed to withstand all anticipated bather loads. Outdoor pools must have a minimum of 27 square feet for each person in the deep end of the pool and 15 square feet for each person in the shallow end of the pool in the pool's maximum anticipated bather load. Indoor pools must have a minimum of 24 square feet for each person in the pool's maximum anticipated bather load. Spas must have a minimum of 10 square feet for each person in the spa's maximum anticipated bather load. [This subsection is effective on the date when it has been adopted by the department of commerce as part of the state building code and filed with the secretary of state pursuant to 50-60-204, MCA.]

(2) The pool or spa and related facilities shall be built in accordance with the plans as approved unless a modification of the approved plans is approved in writing by the regulatory authority. The plans and specifications shall be drawn to scale and accompanied by proper specifications so as to permit a comprehensive review of the plans including the structural detail and shall include, but not be limited to:

(a) A plan and sectional view of both the pool or spa and surrounding area.

(b) A piping diagram showing all appurtenances including treatment facilities in sufficient detail to permit hydraulic analysis of the system.

(c) Specifications containing details on all treatment

equipment, including catalog identification of pumps, disinfection feeders, chemical feeders, filters, strainers, and related equipment.

(d) Materials and the finish of the pool or spa, including decks and walkways and details of their construction.

(e) Construction and design details related to bathhouses and other sanitary facilities.

(f) Construction and design details related to anticipated bather load of the pool or spa.

(3) Before the regulatory authority may approve the plans and specifications, the same must be reviewed and approved by the local or state building official having jurisdiction in the area in which the pool or spa is located.

(4) Whenever plans and specifications are required by (1) of this rule, and prior to the operation of the pool or spa, the regulatory authority shall inspect the pool or spa and related facilities to determine whether it was constructed in compliance with the applicable requirements of this subchapter and with the approved plans and specifications. On major facilities, such as school, city, or county pools or other large or complex facilities, the department shall perform preopening inspections when requested by a local health authority and when the department determines that its own expertise is necessary for an adequate technical inspection. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1504 WATER SUPPLY (1) Enough potable water for the needs of the pool or spa facility must be provided from a source constructed and operated in accordance with Title 75, chapter 6, MCA, and ARM Title 17, chapter 38, subchapters 1 and 2, public water and wastewater systems.

(2) The department hereby adopts and incorporates by reference the rules in Title 17, chapter 38, subchapters 1 and 2, which set standards for construction, testing, treatment and operation of public water supplies in order to prevent their contamination. A copy of Title 17, chapter 38, subchapters 1 and 2, may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, Montana, 59620-0901. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-106, 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1505 SEWAGE (1) All sewage, including liquid waste, must be disposed of by a public sewerage system or by a sewage disposal system constructed and operated in accordance with Title 75, chapter 6, MCA, and ARM Title 17, chapter 38, subchapter 1, plans for public water and wastewater systems.

(2) The department hereby adopts and incorporates by reference the rules in ARM Title 17, chapter 38, subchapter 1, which set construction and operation standards for public

sewerage systems. A copy of ARM Title 17, chapter 38, subchapter 1, may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, Montana, 59620-0901. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-106, 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1506 CONSTRUCTION AND DESIGN (1) Outdoor swimming pools and spas shall be located where they will not be exposed to excessive dust or other materials which would be deleterious to human health or hazardous to the operation or use of the pool or spa.

(2) Swimming pools and spas shall be constructed of concrete, steel or other approved materials with an impervious finish. No wooden spa units are permitted.

(a) The inside surface of the swimming pool or spa shall be constructed of an impervious material which will retain a smooth finish with no cracks or open joints.

(b) Where the water depth is less than 5 feet, the floor surface shall be smooth to facilitate cleaning and the movement of bottom deposits to a main drain.

(c) Where the water depth is greater than 5 feet, the floor surface shall be as smooth as practical while having a non-slip finish.

(d) The walls and floor shall be light-colored.

(e) Sand or earth floors shall not be allowed for public swimming pools or spas.

(3) The swimming pool shall be designed and constructed in such shape or contour that efficient and safe control of the swimming pool and bathers can be accomplished and so that the recirculation of water in the swimming pool is not impeded.

(a) The slope of the floor of all pools shall not exceed 1 foot vertical drop for every 12 feet, as measured horizontally in the shallow areas, and 1 foot vertical to 3 feet horizontal, as measured in the deep area. These slopes shall be uniform except at the transition point from shallow to deep areas (5 foot depth).

(b) Walls of a swimming pool shall be vertical for a water depth of 6 feet, and shall not have a slope greater than 45°.

(c) Safety ledges or offset ledges when provided on vertical walls in the deep areas of the swimming pool shall be at least 30 inches below the water surface and have a slip-resistant surface. The ledge shall slope 1/2 inch in 4 inches toward the pool. Ledges shall have a maximum width of 8 inches.

(d) Underwater seat benches when provided shall not be over 20 inches below the waterline and shall be:

(i) visually set apart from the surrounding pool surfaces by either a contrasting color or visual image; and

(ii) completely recessed in either a separate alcove or walls indentation especially designed to accept the same when located in the deep areas of the pool; and

(iii) provided with slip-resistant surfaces.

(e) The main drain outlet or outlets of the swimming pool shall be plainly visible and located at the deepest portion of

the pool.

(f) The depth of the water shall be plainly marked at or above the water surface on the vertical pool wall and on the edge of the deck or walk next to the pool, at maximum and minimum points and at the points of break between the deep and the shallow areas and at intermediate one foot increments of depth, spaced at not more than 25 feet intervals measured peripherally. The depth in the diving areas will be appropriately marked. Lap pools must have depth markers at 25 foot intervals and at the ends. Depth markers shall be in numerals of 4 inch minimum height and a color contrasting with the background. Where depth markers cannot be placed on the vertical walls above the water level, other means shall be used, said markings to be plainly visible to persons in the pool.

(g) Swimming pools having diving equipment shall be designed and provide for a minimum water depth as called for in Table I and Diagram 1, copies of which follow this rule and by this reference are made a part hereof.

(h) There shall be an unobstructed clear vertical distance of 13 feet above any diving board measured from the center of the front end of the board. This area shall extend horizontally at least 8 feet behind, 8 feet to each side, and 16 feet forward from the horizontal location of the tip of the diving equipment.

(i) A horizontal separation of 10 feet shall be provided between diving boards except this may be reduced to 8 feet for surface boards of less than 1/2 meter in height.

(j) The minimum depth of water in the swimming pool shall be 3 feet except for special-purpose swimming pools, special instructional pools, or restricted or recessed areas, which shall be separated from the shallow portion of the pool by safety lines supported by buoys attached to the side walls.

(k) The maximum depth of the water at the shallow end of the swimming pool shall not exceed 3 feet 6 inches, except in lap pools where a maximum of 4 feet is allowed.

(4) When a water slide is provided in conjunction with a pool, the slide must be installed according to manufacturer's instructions, be approved by the manufacturer for use with public and privately owned public swimming pools, and meet all applicable building codes. (History: 50-53-103, MCA; IMP, Sec. 50-53-103 and 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 2000 MAR p. 3232, Eff. 11/23/00.)

TABLE 1

RELATED DIVING EQUIPMENT		MINIMUM DIMENSIONS										MINIMUM WIDTH OF POOL AT:		
MAX. DIVING BOARD LENGTH	MAX. BOARD HGT. OVER WATER	D ₁	D ₂	R	L ₁	L ₂	L ₃	L ₄	L ₅	PT. A	PT. B	PT. C		
10'	26" 2/3 meter	2.13m 7'0"	2.59m 8'6"	1.68m 5'6"	.76m 2'6"	2.44m 8'0"	3.20m 10'6"	2.13m 7'0"	8.53m 28'0"	4.89m 16'0"	5.49m 18'0"	5.49m 18'0"		
12'	30" 1/4 meter	2.29m 7'6"	2.74m	1.83m 6'0"	.91m 3'0"	2.74m 9'0"	3.65m 12'0"	1.22m 4'0"	8.53m 28'0"	5.49m 18'0"	6.10m 20'0"	6.10m 20'0"		
16'	1 meter	2.59m 8'6"	3.05m 10'0"	2.13m 7'0"	1.22m 4'0"	3.05m 10'0"	4.57m 15'0"	.61m 2'0"	9.45m 31'0"	6.10m 20'0"	6.71m 22'0"	6.71m 22'0"		
16'	3 meter	3.35m 11'0"	3.65m 12'0"	2.59m 8'6"	1.23m 6'0"	3.20m 10'6"	6.40m 21'0"	0	11.43m 37'6"	6.70m 22'0"	7.32m 24'0"	7.32m 24'0"		

L₂, L₃ and L₄ combined represent the minimum distance from the tip of board to pool wall, opposite diving equipment.

16.10.1507 AREA REQUIREMENTS, DECK AREAS, HANDHOLDS

(1) Consideration must be given to the shape of the pool or spa from the standpoint of safety, the need to facilitate supervision of bathers using the pool or spa, and maintaining adequate recirculation of the pool or spa waters.

(2) The decks of all swimming pools shall have a minimum width of 6 feet of unobstructed deck area except that privately owned public pools may have a minimum width of 4 feet of unobstructed deck area, measured from the pool edge.

(3) The deck surface must meet the following requirements:

(a) The deck surface must be impervious and easily cleanable, and must entirely surround the swimming pool.

(b) Use of deck carpet is not permitted within 6 feet of the pool or spa.

(c) If deck carpet is used, it must be clean and be maintained in good repair.

(d) The department may allow a deviation from (3)(a) and (b) above after the applicant submits to the department:

(i) a written application that demonstrates to the department that the deviation does not have the potential to cause adverse public health effects, the use of deck carpeting is necessary for safety purposes due to the nature of the pool or spa, and no reasonable alternative to the use of deck carpeting exists; and

(ii) a written plan that describes measures ensuring the deck carpeting is thoroughly cleaned daily and appropriate methods of cleaning and sanitizing will be used.

(4) The decks of all spas shall be a minimum of 4 feet wide and shall extend around 50% of the unit.

(5) A fence or barrier shall be provided on the outside of the deck area of all outdoor swimming pools. All such barriers shall:

(a) be at least 60 inches in height,

(b) have no openings larger than 4 inches in width, except for doors and gates,

(c) be located beyond the minimum deck space requirements, but shall be located so that the area intended for swimmers can be isolated,

(d) be constructed so that the pool shall be visible through the barrier, and

(e) be constructed so that all openings in the barrier are large enough to permit entry and are equipped with self-closing gates or doors with positive latching closers and locking mechanism at a height of at least 4 feet 6 inches above the ground.

(6) The entire deck area shall have a slope of not less than 1/4 inch per foot directed away from the swimming pool or spa edge or sloped to a deck drain. The deck area shall have a non-slip finish.

(7) Foreign material such as grass or dirt shall not be allowed in areas adjacent to swimming pools or spas unless properly fenced off to prevent access on the part of the bathers. If access is allowed to such areas, facilities shall be provided for the proper cleaning of the bathers' feet before they again enter the bathing areas.

(8) Deck drains shall be provided on all indoor pools and spas and shall be so located that the deck drain will not service more than 400 square feet of the deck. Outdoor pools shall utilize either deck or perimeter drain systems.

(9) The deck area drains shall not be connected to the recirculation piping system.

(10) Every pool shall be provided with handholds.

(11) The use of undrained wood deck material or of clear glass around the swimming pool deck is prohibited. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96; AMD, 1997 MAR p. 580, Eff. 3/25/97.)

16.10.1508 OVERFLOW GUTTERS (1) Overflow gutters shall be provided on all swimming pools having a surface area over 1600 square feet unless it is demonstrated to the regulatory authority that skimmers will do an equivalent recirculation job. Swimming pools having a surface area less than 1600 square feet may be provided with either overflow gutters or skimmers.

(2) Overflow gutters shall extend around the entire perimeter of the swimming pool, except at steps or recessed ladders.

(3) The overflow gutter shall be capable of continuously removing 50% or more of the recirculated water and returning it to the filter.

(4) All overflow gutters shall be connected to the recirculation system through a surge tank. The gutter, drains, and return piping to the surge tank shall be designed to rapidly remove overflow water caused by recirculation displacement, wave action, or other causes.

(5) The opening into the gutter beneath the coping shall not be less than 4 inches and the interior of the gutter shall not be less than 3 inches wide with a depth of at least 3 inches. Where large gutters are used they shall be designed to prevent entrance or entrapment of the bathers' arms or legs.

(6) The overflow edge or lip shall be rounded and must not exceed 2 and 1/2 inches in thickness for the top 2 inches. The overflow edge or lip shall also be designed to serve as a handhold.

(7) The overflow gutters shall be provided with outlet pipes which shall in any case be at least 1 and 1/2 inches in diameter and shall drain at least 15 lineal feet of gutter. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1509 SKIMMERS (1) Skimmers may be used in place of

overflow gutters as a means of skimming and recirculating the water. Skimmers are permitted on swimming pools if at least one skimming device is provided for each 500 square feet of water surface area or fraction thereof, with a minimum of two skimmers required. The skimmers shall be located at least 30 feet apart. Skimming devices shall be built into the pool wall, shall develop sufficient velocity on the pool water surface to induce floating oils and wastes into the skimmer from the water surface of the entire pool area, and shall meet the following general specifications:

(a) The piping and other pertinent components of the skimmers shall be designed for a total capacity of at least 80% of the required filter flow of the recirculation system and no skimmer shall be designed for a flow-through rate of less than 30 gallons per minute.

(b) The skimmer weir shall be automatically adjustable and shall operate freely with continuous action to variations in water level over a range of at least 4 inches. The weir shall be of such buoyancy and design so as to develop an effective velocity.

(c) An easily removable and cleanable basket or screen through which all overflow water must pass shall be provided to trap large solids. The skimmer shall be constructed of sturdy corrosion-resistant materials.

(2) All swimming pools shall be equipped for adding make-up water to the swimming pool as necessary for proper operation of skimmers and gutters.

(3) Spa pools require a minimum of one skimmer per unit.

(4) Each skimmer shall be equipped with an equalizer line or other device to prevent airlock in the suction line should the water of the pool drop below the weir level. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1510 STEPS, LADDERS AND HANDRAILS (1) Steps and ladders shall be of an impervious material easily cleanable and sloped to drain.

(2) Steps or ladders shall be provided at the shallow end of the swimming pool if the vertical distance from the bottom of the pool to the deck or walk is over 2 feet. Recessed steps or ladders shall be provided at the deep portion of the swimming pool, and if the pool is over 30 feet wide, such steps or ladders shall be installed on each side. Ladders shall be so located that divers do not need to turn back in order to reach them.

(3) Steps leading into the swimming pool or spa shall be of non-slip design, have a minimum tread of 8 inches and a maximum rise or height of 10 inches.

(4) Swimming pool and spa ladders shall be corrosion-resistant and shall be equipped with non-slip treads. All ladders shall be so designed as to provide a handhold and shall be securely attached to the side of the pool or spa. There shall be a clearance of not more than 5 inches nor less than 3

inches between any ladder and the pool wall. If steps are inserted in the walls or if stepholes are provided, they shall be of such design that they may be cleaned readily and shall be arranged to drain into the pool to prevent the accumulation of dirt thereon. Step holes shall have a minimum tread of 5 inches and a minimum width of 14 inches.

(5) When steps, stepholes, or ladders are provided in the swimming pool or spa, handrails extending over the coping or edge of the deck are required. Where handrails are used in conjunction with steps or stairs, they must extend from the bottom of the last step leading into the pool, over the coping to the edge of the deck.

(6) Supports, platforms, and steps for diving boards shall be of sufficient structural strength to safely carry the maximum anticipated loads. Steps shall be of corrosion-resistant material, easily cleanable and of non-slip design. Handrails shall be provided at all steps and ladders leading to diving boards. Diving boards more than one meter high shall be protected with guard railings.

(7) A low diving board shall not be located below a high diving board. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1511 HOSE CONNECTIONS (1) Hose connections shall be provided to enable all parts of the swimming pool and spa area to be reached with easily manipulated hose length.

(2) Water volume and pressure shall be sufficient to provide effective cleaning and care should be taken so that deck wash material is not drained or sprayed into the pool or spa. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1512 RECIRCULATION SYSTEM (1) The recirculation system must consist of pumping equipment, hair and lint catcher and filters, together with all necessary pipe connections to the inlets and outlets of the swimming pool and spa and a valve system for backwashing the filters. As an integral part of the recirculation system, equipment must be provided for disinfecting the water and adding any necessary chemicals and make-up water. The entire system and all of its component parts must be capable of producing a 6-hour turnover of the entire volume of the swimming pool except that a flow-through hot springs pool which recirculates must be capable of producing an 8-hour turnover of the entire volume of pool water to waste. The main drain or drains in the deep end of the pool shall be clearly visible at all times. Spas require a 30 minute turnover rate of the entire volume of the unit.

(2) All recirculation equipment furnished shall be provided with installation and operation instructions.

(3) Inlets are features of the swimming pool or spa which return water to the pool or spa from the filters as a part of the recirculation system. Inlets shall be submerged and shall be located to produce uniform circulation of water throughout the swimming pool without the existence of dead spots and to

carry away pool bottom deposits to the outlets. The minimum number of inlets shall be based on either one inlet per 600 square feet or portion thereof of pool area, or one inlet per 15,000 gallons, whichever is greater. A minimum of 2 inlets is required on swimming pools and spas.

(4) Where the distance across the shallow portion of the swimming pool is more than 15 feet, multiple inlets shall be provided, so spaced that each inlet will serve a linear distance of not more than 15 feet. Inlets shall be placed at 15 foot intervals around the entire perimeter. In any case, an adequate number of inlets shall be provided, properly spaced and located to accomplish complete and uniform recirculation of water and maintenance of uniform disinfectant residual at all times.

(5) All inlets shall be designed to have adjustable orifices.

(6) All inlets shall discharge at a depth of at least 12 inches below the swimming pool or spa overflow level.

(7) Floor inlets when used shall be placed at 15 foot intervals and the distance from these inlets to the wall shall not exceed 15 feet.

(8) Outlets, or main drains, are features of the swimming pool and spa that are part of the recirculation system and also serve as the pool or spa drains, when necessary. The grated areas shall be of sufficient size to decrease the possibility of clogging or creating suction dangerous to the safety of the bathers.

(9) All swimming pools and spas shall be provided with a main drain outlet or outlets at the deepest point to permit the pool to be completely and easily emptied.

(10) Drains must be covered by an anti-vortex grating which is not readily removable by bathers.

(11) The grating openings of the main drain outlet in the floor of the pool or spa shall be sufficient so that no suction hazard exists.

(12) Multiple main drain outlets shall be provided where the width of the pool is more than 30 feet. In such cases, these outlets shall be spaced not more than 20 feet apart, nor more than 15 feet from side walls.

(13) The hair and lint catcher device shall be installed on the suction side of the pump. The strainer shall be constructed of non-corrosive material and shall be so located as to be easily accessible for regular cleaning.

(14) Vacuum equipment shall be provided to remove sediment and other accumulations from the bottom of the swimming pool or spa.

(15) Where water from the public water system is added to the pool or spa, cross connections between the public water system and the pool or spa water shall be eliminated by pumping makeup water from a pump suction well or admitting water to the pool or spa by means of an air-gapped supply, preferably located under a low diving board.

(16) No direct connections to sewers shall be permitted and all pool and spa drains to sewers shall be broken at a

point where any sewage, which may back up from the sewer, can enter the pool or spa piping.

(17) No more than two spa units may utilize one recirculation, disinfection system and no spa may utilize the recirculation/disinfection system of a swimming pool. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1513 DISINFECTANT AND CHEMICAL FEEDERS The swimming pool or spa shall be equipped with a chlorinator or other continuous disinfectant feeder which meets the following applicable requirements:

(1) All chemical feeders shall be approved by the national sanitation foundation.

(2) When compressed chlorine gas is used, the following additional features shall be provided:

(a) The chlorine and chlorinating equipment shall be in a separate, well-ventilated room. Such rooms shall not be below ground level and shall be provided with vents near the floor which terminate out-of-doors. The door of the room shall not be open to the swimming pool, and shall open to the outside.

(b) Chlorine cylinders shall be anchored to prevent their falling over. A valve stem wrench shall be present on the chlorine cylinder so that supply can be shut off quickly in case of an emergency. A valve protection hood shall be kept in place except when the cylinder is connected.

(c) During accidents or interruptions of the water supply, the chlorine feeding device shall be designed so that leaking chlorine gas will be conducted to the outdoors.

(d) The gas mask designed for use in a chlorine atmosphere and of a type approved by the Mine Safety and Health Administration (MSHA) or the National Institute of Occupational Safety and Health (NIOSH) shall be provided. In addition, replacement canisters shall be provided and a record shall be kept of gas mask usage to ensure that the mask will be serviceable when needed. The gas mask shall be kept in a closed cabinet, accessible without a key, located outside of the room in which the chlorinator is maintained.

(e) Chlorination equipment shall be installed and operated by or under the supervision of personnel experienced with installation and operation of such equipment.

(f) Chlorine use must also meet all local or other state requirements.

(3) A change in method or type of disinfection must be approved in writing by the regulatory authority. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1514 FILTRATION EQUIPMENT (1) Filtration equipment shall be provided on all swimming pools and spas and shall be installed and maintained in accordance with the manufacturer's specifications.

(2) The filter system shall be designed with necessary valves and piping to permit:

- (a) filtering to swimming pool or spa,
- (b) isolation of individual filters for repair while other units are in service,
- (c) complete drainage of all part of the system, and
- (d) necessary maintenance, operation, and inspection in a convenient manner.

(3) Filters will be backwashed at least once per week at swimming pools and daily at public spas, with the exception of cartridge filters which are discussed in (5) of this rule.

(4) A rate of flow indicator shall be provided and installed in such manner as to show the recirculation rate of the pool or spa water. The indicator shall measure the rate of flow through the filtering system with an appropriate range readable in gallons per minute accurate within 10% actual flow.

(5) All cartridge type filters must be approved by the national sanitation foundation or shall be approved as equivalent thereto by the regulatory authority. A minimum of three filters must be provided for each pool or spa, one in use, one which has been cleaned and is ready for use, and one which is being cleaned.

(6) All sand-type filters, whether of the gravity or pressure type, and including high-rate filters, shall be approved by the national sanitation foundation or shall be approved as equivalent thereto by the regulatory authority.

(a) The filter system shall be provided with influent and effluent pressure indicators as are required to indicate the condition of the filters. The filter system shall be provided with an air relief device at or near the high point of the filter. A sight glass shall be provided on the back-wash discharge line.

(b) Each pressure type filter tank shall be provided with an access opening of not less than a standard 11 inch by 15 inch manhole and cover.

(c) Devices with reasonably accurate dosage control features shall be provided for adding coagulants ahead of the filters.

(7) All diatomaceous earth type filters, whether of the vacuum or pressure type, shall be approved by the national sanitation foundation or shall be approved as equivalent thereto by the regulatory authority.

(a) Filtration areas shall be determined on the basis of effective filtering surfaces as created by the septum supports with no allowances for areas of impaired filtration such as broad supports, folds, or portions which may bridge.

(b) The filter and all component parts shall be of such materials, design, and construction to withstand normal continuous use without significant deformation, deterioration, corrosion, or wear which could adversely affect filter operation.

(c) The filter shall be so designed and constructed, or

provision made, to preclude the introduction of appreciable quantities of filter-aid into the pool or spa during precoating operations.

(d) The filters shall be designed and installed in such a manner that they may be easily disassembled with allowances made for adequate working space above and around the filter to allow the removal and replacement of any part and for proper maintenance. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1515 CROSS-CONNECTIONS (1) No piping arrangement shall exist under any conditions which will permit sewage or waste water to enter the recirculation system or water from the recirculation system or swimming pool or spa to enter the make-up water supply.

(2) No pipe furnishing water for the make-up supply shall be physically connected to the recirculation system regardless of valve arrangement.

(3) The make-up water line discharging directly to the swimming pool shall have its point of discharge at least 6 inches above the swimming pool overflow level.

(4) The make-up water line discharging to a surge or balancing tank shall have its point of discharge at least 6 inches above the rim of the tank.

(5) All other accessories to the recirculation system, such as chemical solution feeders and water-fed chlorinators shall be protected by air gap against back-siphonage into the water supply system. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1516 PIPING SYSTEM (1) The piping system shall be designed to reduce friction losses so that adequate flows are maintained in the piping system. The piping system of the pool shall be painted in distinguishing colors to determine filtered water, make-up water, waste water, vacuum lines and heating lines. The color system for distinguishing the different piping systems in a swimming pool or spa shall be as follows:

- (a) green -- filtered water
- (b) yellow -- raw or make-up water
- (c) black -- waste water
- (d) red -- heating lines
- (e) blue -- vacuum lines
- (f) orange -- unfiltered water

(g) The piping system may use labels stating the pipe function with direction of flow arrows as an acceptable pipe identification method alternative to color coding. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1517 EQUIPMENT ROOM (1) The equipment room shall be so located that it cannot be entered directly from shower rooms. If entry is gained through the pool or spa deck area, the equipment room must be kept secure.

(2) The recirculation equipment shall be conveniently located for inspection and servicing. Adequate headroom shall be provided above pressure filters.

(3) The floor shall have a minimum slope of 1/4 inch per foot toward the drains with no low spots which would allow the water to stand. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1518 WATER TESTING AND TESTING EQUIPMENT (1) An approved test kit for determining the pH range of 6.8 to 8.2, or 7.2 to 8.5 for hot springs pools, must be provided. The kits must be capable of measuring pH accurately to the nearest 0.2 pH units.

(2) A test kit for the determination of total alkalinity shall be provided.

(3) An approved test kit or oxidation reduction potential (ORP) measuring device for the determination of chlorine residuals in the range of 0 to 5.0 parts per million, or bromine residuals in the range of 0 to 8.0 parts per million, must be provided. When testing kits for chlorine utilize comparative color standards, the standards must be accurate to within plus or minus 0.1 ppm. The test kit must test for free and total chlorine residual. DPD test method is the required procedure.

(4) Whenever cyanurates are used as a stabilizer, a test kit shall be provided which is capable of accurately measuring the cyanurate concentration to 150 parts per million in increments of 25 parts per million. Cyanurate concentrations in the pool or spa shall not be higher than 150 parts per million.

(5) Equivalent test kits or ORP measuring devices for other approved disinfectant residuals must be provided.

(6) ORP may be used as an additional diagnostic tool to aid in the determination of overall water quality but must not be used as a complete substitute for DPD testing. If ORP is used as an additional diagnostic tool for determining sanitizer strength, the minimum standard is 650 millivolts (mV) and the preferred standard is 750 mV. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107 and 50-53-115, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1519 VENTILATION AND LIGHTING (1) Bath-houses, dressing rooms, shower rooms, and toilet rooms shall be adequately ventilated. Ventilation of indoor swimming pools and spas shall be so designed that bathers will not be subjected to drafts and no buildup of condensation will occur.

(2) All indoor pools or spas and all outdoor pools or spas operated at night shall have artificial lighting sufficient to permit a 6 inch black disc on a white field to be visible in the deepest part of the pool or spa. Such lights shall be spaced to provide illumination so that all portions of the pool or spa, including the bottom, may be readily seen without glare. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff.

6/7/96.)

16.10.1520 DRESSING ROOMS, TOILETS, AND SHOWER AREAS

(1) The requirements set forth in this rule apply to all public swimming pools and spas and to any privately owned public pools or spas allowing non-members or non-lodging guests to utilize the facility.

(2) The ceilings, walls and floors of dressing rooms, toilet and shower areas shall be constructed of smooth, impervious, easily cleanable material, not adversely affected by steam, water, or disinfectant.

(3) The floors shall be smooth, non-slip to bare feet, shall have no open cracks or joints, and shall have a minimum slope of 1/4 inch per foot toward the drains with no low spots which will allow water to stand.

(4) Deck carpet will not be permitted within 6 feet of shower areas or in hallways in or leading to dressing rooms which will normally be traveled by individuals wearing shoes.

(5) Partitions shall have a minimum clearance of 6 inches above the floor.

(6) Dressing rooms, toilet and shower areas shall be lighted so that all parts are easily visible for cleaning and maintenance.

(7) Public swimming pools and spas shall be equipped with dressing rooms located adjacent to the locker or checkroom and showers.

(8) Toilet facilities shall be provided for each sex. Flush water closets and urinals shall be provided and shall be kept clean and properly maintained. The ratio of water closets shall be one closet and one urinal for each 50 men or portion thereof and one water closet for each 50 women or portion thereof.

(a) All fixtures shall be properly protected against back siphonage.

(b) All fixtures shall be so designed that they may be readily cleaned and maintained.

(c) Hand washing facilities must be provided and shall include either soap and disposable towels or hand blowers.

(9) Separate shower facilities shall be provided for men and women, and shall be so located that bathers must pass from the shower room directly into the swimming pool or spa area. The minimum number of showers provided shall be in proportion of one to 40 bathers or portion thereof.

(a) All showers must be equipped with a mixing valve.

(b) Soap shall be provided for each shower unit.

(c) Where shower booths are provided, the booth partitions shall be of a material which will not be damaged by shower water and shall have a minimum clearance of 6 inches above the floor.

(d) Shower curtains are not permitted. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1521 WASTE DISPOSAL (1) There shall be no direct physical connection between the sewer system and any drain from the swimming pool or spa recirculation system. Any swimming pool or spa when discharged to the sewer system, storm drain, or other approved drainage source shall connect through a suitable air break so as to preclude the possibility of backflow of sewage or other contaminant into the swimming pool piping system.

(2) Toilet room sewage and shower drainage shall be discharged to an approved municipal sanitary sewage system or to a sewage disposal system as lawfully approved by the regulatory authority. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1522 BACTERIOLOGICAL AND CHEMICAL QUALITY

(1) Swimming pool and spa waters must be maintained with a chemical quality sufficient to prevent levels of bacteria from exceeding 200 bacteria per milliliter as determined by the total standard (35°C) agar plate count, or the presence of more than four coliform bacteria per 100 milliliters by the membrane filter technique, or show a positive test (confirmed test) for coliform organisms in any of five 10-milliliter portions of a sample when the pool is in use. All samples must be collected, dechlorinated, and examined in accordance with the procedures outlined in section 9213 of the Standard Methods for the Examination of Water and Wastewater (APHA, AWA, WEF). Not more than two consecutive samples in a 1-month period may exceed the levels specified.

(2) Chemicals added to the swimming pool or spa water shall not cause irritation of the eyes, skin or mucous membranes of the bathers.

(3) All swimming pools and spas, when open or in use, must be continuously disinfected by a chemical which imparts a residual effect and must be maintained in an alkaline condition. Disinfection must be handled by mechanical means. A chlorine residual of 1.0-5.0 (3.0-5.0 ppm recommended) must be maintained in the pool at all times. A difference of .5 ppm between free and total chlorine readings in swimming pools requires super-chlorination. Spa pools must be superchlorinated as necessary which will be indicated by use of a DPD test kit. Spa pools which utilize a combination ozone and bromine disinfection method are not required to superchlorinate.

(4) If halogens other than chlorine are used, residuals of equivalent disinfectant strength shall be maintained.

(5) The regulatory authority may accept other disinfecting materials or methods when they are demonstrated to provide a

readily measurable residual and to otherwise be equally effective to the chlorine concentration required herein, and not be dangerous to the public health. Regulatory authority approval must be given prior to utilizing other disinfecting materials.

(6) Chemicals used in controlling algae growth shall not pose a risk to public health or contribute toxic properties to the water.

(7) The water shall have sufficient clarity at all times so that a black disc, 6 inches in diameter, is clearly visible and sharply defined when placed on a white field at the deepest point of the swimming pool or spa.

(8) Swimming pool and spa waters shall be maintained at a pH of not less than 7.2 and not greater than 7.8.

(9) The total alkalinity (TA) of the water must be at least 80 ppm and no greater than 200 ppm. TA levels are 100-125 ppm for plaster pools, 80-150 ppm for spas and 125-150 ppm for painted and fiberglass pools. Pools must be in chemical balance, or water balance, as determined by the saturation index.

(a) Calcium hardness readings must be taken and recorded at least weekly to determine water chemical balance. Chemical balance, as determined by the saturation index, must be tested at a minimum of once per week on pools, or more frequently as necessitated by the conditions of the pool. If a spa does not meet the TA level requirements for saturation index and chemical balance and is not chemically corrected, the spa water must be completely exchanged with fresh make up water according to one of the frequency standards in ARM 16.10.1523(8).

(b) The saturation index reading must be maintained between -.5 and +.5. Adjustments must be made to the pool water over the next 24 hours as determined by the saturation index.

(c) The following table must be used to determine the saturation index:

$$\text{Saturation Index} = \text{pH} + \text{TF} + \text{CF} + \text{AF} - 12.1$$

Numerical Values For Formula

		<u>Calcium</u> <u>Hardness</u> <u>Expressed</u>		<u>Total</u> <u>Alkalinity</u> <u>Expressed</u>	
<u>TEMP</u> <u>°F</u>	<u>TF</u>	<u>AS PPM</u> <u>CaCO₃</u>	<u>CF</u>	<u>AS PPM</u> <u>CaCO₃</u>	<u>AF</u>
32	0.0	5	0.3	5	0.7
37	0.1	25	1.0	25	1.4
46	0.2	50	1.3	50	1.7

53	0.3	75	1.5	75	1.9
60	0.4	100	1.6	100	2.0
66	0.5	150	1.8	150	2.2
76	0.6	200	1.9	200	2.3
84	0.7	300	2.1	300	2.5
94	0.8	400	2.2	400	2.6
105	0.9	800	2.5	800	2.9
128	1.0	1,000	2.6	1,000	3.0

Index between -0.5 and +0.5 is balanced water.
Over +0.5 is scale forming.
Below -0.5 is corrosive.

Key: TF = temperature factor
CF = calcium factor
AF = alkalinity factor

(10) The department hereby adopts and incorporates by reference section 9213 of the Standard Methods for the Examination of Water and Wastewater by the American Public Health Association, the American Waterworks Association, and the Water Environmental Federation (APHA, AWA, WEF), 19th Edition, 1995, which establishes test procedures and what to test for in recreational waters, including swimming pools and public bathing places that are not swimming pools. Copies of section 9213 of the Standard Methods for the Examination of Water and Wastewater (APHA, AWA, WEF) may be obtained from the Department of Public Health and Human Services, Health Policy and Services Division, Food and Consumer Safety Section, 1400 Broadway, P.O. Box 202951, Helena, Montana, 59620-2951. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107 and 50-53-115, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96; AMD, 2000 MAR p. 3232, Eff. 11/23/00.)

16.10.1523 OPERATION, CLEANING AND MAINTENANCE (1) An accurate record showing the daily operation of the swimming pool or spa must be maintained at the facility. This record must include information regarding the sanitation and safety aspects of the pool or spa, including but not limited to disinfectant residuals, pH, combined chlorine, cyanuric acid, water temperature, maintenance records, and bather load. All sanitation and safety aspect tests must be conducted if appropriate for the type of pool or spa operation. Where conducted, the sanitation and safety aspect tests, excluding testing for cyanuric acid residuals, must be tested at least twice daily, or more frequently if required to ensure that water safety and sanitation standards are met. Cyanuric acid residual testing must be conducted at least weekly, or more frequently if required to ensure that water safety and sanitation standards are met, for swimming pools or spas which utilize either

cyanuric acid or a stabilized chlorine compound utilizing cyanuric acid as a chlorine stabilizer. These records must be kept on file for 12 months for review by the regulatory authority. The swimming pool or spa must furnish copies of the records to the department upon the department's request.

(2) All swimming pools, spas, and appurtenances thereto shall be maintained in a clean and sanitary condition at all times.

(3) Visible dirt on the bottom of the swimming pool or spa shall be removed once daily, or more often if necessary to keep the pool or spa bottom clean.

(4) Visible scum or floating material on the surface of the swimming pool or spa shall not be permitted and shall be removed by flushing or skimming or other effective means.

(5) The swimming pool or spa operator shall be responsible for maintaining the sanitary quality of the swimming pool or spa water at all times.

(6) The swimming pool or spa operator shall immediately correct any condition which is not in compliance with these rules and if unable to do so shall notify the regulatory authority.

(7) Spas that are not flow-through hot springs spas and are used primarily for soaking or recreational bathing must be operated at a water temperature not exceeding 104°F as determined by the use of an inline thermometer.

(8) Spas must be drained, thoroughly cleaned, and sanitized using any of the frequency standards in (8)(a), (b) or (c) below, which must be documented in the sanitary and safety aspect test records specified in ARM 16.10.1523(1):

(a) weekly; or

(b) when the total dissolved solids reach 1500 ppm above water supply level; or

(c) when required as determined by utilizing the formula: $(\text{number of spa gallons} \div 3) \div \text{number of bathers in a 24 hour period} = \text{number of days before dumping}$.

(9) Every spa must have a clock visible from the spa so that bathers can monitor the time they have spent in the spa.

(10) Operators of public swimming pools and spas must be thoroughly knowledgeable of good practices of pool operation and with the laws and rules pertaining to public pools and spas. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-106, 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1524 SAFETY (1) A conduct safety sign or signs must be conspicuously posted at every pool and spa regulated by this subchapter and include the following words or words of substantially the same meaning:

(a) "Offensive or unsanitary behavior is prohibited."

(b) "Boisterous or rough play or running is not permitted in the swimming pool or spa, the walk area, in dressing rooms, in shower rooms, or in toilet rooms."

(c) "Bottles, crockery, glassware, or other hazardous

objects are not permitted in the swimming area."

(d) "Smoking is not permitted in the swimming or bathing area."

(e) "Alcohol, food or gum is not allowed in or near the pool."

(2) A medical safety sign or signs must be conspicuously posted at every spa regulated by this subchapter and include the following words or words of substantially the same meaning:

(a) "No person under the influence of an intoxicating liquor or drug may use the pool."

(b) "Warning - people using prescription medications and/or having the following medical conditions should consult with their physician before entering the spa: pregnancy, heart disease, diabetes, high blood pressure, or other serious medical condition."

(c) "Heat stroke warning - adults limited to 15 minutes in spa and no children under age 5 years allowed."

(3) Every privately owned public swimming pool or spa regulated by this subchapter that chooses not to have a lifeguard must conspicuously post at every pool or spa location a warning sign that states "NO LIFEGUARD ON DUTY" or words of equivalent meaning, with clearly legible letters at least 4 inches high. In addition, the sign must state "NONSWIMMERS AND CHILDREN UNDER AGE 14 SHOULD NOT USE THE POOL WITHOUT A RESPONSIBLE ADULT IN ATTENDANCE".

(4) An individual certified in cardiopulmonary resuscitation must be on the premises at all times. Copies of all CPR certification must be kept on the pool premises and be available for review and verification during pool inspections.

(5) The operator or owner of a public swimming pool or spa shall not allow the pool to be used:

(a) when the personnel and equipment requirements set forth in ARM 16.10.1525 are not met; or

(b) when ordered closed by the regulatory authority.

(6) If an unlicensed swimming pool or spa is adjacent to or on the premises of an establishment subject to Title 50, chapters 51 or 52, MCA, the establishment must post public notification adjacent to the pool or spa that it is a nonlicensed swimming pool or spa, that is not available for use by the public, and must ensure that the public does not use the pool or spa. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107 and 50-53-115 MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96; AMD, 2000 MAR p. 3232, Eff. 11/23/00.)

16.10.1525 EQUIPMENT AND PERSONNEL (1) All equipment used in conjunction with the operation of the swimming pool or spa must be approved by the regulatory authority. An experimental installation may be permitted by the regulatory authority, but should the development fail to produce satisfactory results it must be replaced with accepted design, equipment, and materials.

(2) Every publicly owned public swimming pool must meet the following lifeguard requirements:

(a) The pool must have a trained lifeguard or lifeguards who are in complete charge of the bathing facilities and who have the authority to enforce all safety rules;

(b) The pool must have at least one lifeguard per 2,000 square feet of pool area or fraction thereof, with a minimum of one lifeguard regardless of the size of the pool;

(c) Each lifeguard must be currently certified:

(i) by either the American red cross or the American heart association in methods of cardiopulmonary resuscitation (CPR), first aid, and water safety or its equivalent; and

(ii) as having completed lifeguard training by either the American red cross, the young men's christian association, the boy scouts, or ellis and associates, inc. of Kingwood, Texas. (d) Each lifeguard must be at least 15 years of age; and

(e) The required number of lifeguards must be on duty at all times when a swimming pool is open for use by bathers.

(3) Each owner or operator of a pool or spa must designate and assign a specific individual to maintain safe and sanitary conditions in and around the pool or spa.

(4) Every swimming pool must be equipped with one backboard and either a rescue tube or, in the alternative, one or more ring buoys having a maximum of 15 to 16 inches inside diameter with a 1/4 inch manila-line at least equal in length to the maximum width of the swimming pool attached securely to it and kept in good repair. A shepherd's crook or reaching pole must also be provided. In small swimming pools not exceeding 15 feet in width, a ring buoy with a minimum length of 14 feet of manila throwing line attached may be substituted for a shepherd's crook or a reaching pole. Such safety equipment must be accessible for immediate use in the pool area.

(5) When a lifeguard is required, an elevated seat for the lifeguard must be provided in areas between the 5 feet depth and the deep water and within 2 feet of the edge of the swimming pool and must be high enough to give the lifeguard a complete and unobstructed view of the water.

(6) A guard line separating the shallow portion from the deep portion of the swimming pool must be provided across the pool at the 5 foot depth. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96; AMD, 2000 MAR p. 3232, Eff. 11/23/00.)

16.10.1526 DISEASE CONTROL (1) Any person with a disease in a known communicable form shall not be permitted to use the swimming pool or spa. The designated individual in charge of maintaining safe and sanitary conditions shall make reasonable effort to inspect bathers for evidence of skin disease or open lesions. Persons having any considerable area of exposed sub-epidermal tissues, cuts or the like shall be warned that these may become infected and advised not to use the

swimming pool or spa.

(2) Before entering the pool or spa, all bathers must be required to take a cleansing shower, using warm water and soap. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1527 HOT SPRINGS POOLS AND FLOW-THROUGH HOT SPRINGS POOLS (1) Any hot springs pool other than a flow-through hot springs pool must comply with all other provisions of this subchapter, with the exception that the pH of pool water must be maintained at no less than 7.2 and no greater than 8.5.

(2) In addition to the requirements of (1) above, any hot springs pool, whether or not it is a flow-through pool, must meet the following requirements:

(a) The pool must be equipped with an accurate flow indicator to measure the turnover in the pool, except that the department may allow a deviation from the use of an accurate flow indicator by an applicant who demonstrates in a written application to the department that the water volume exchange turn-over rate from the pool can be accurately measured by an alternative method and that the deviation does not have the potential to cause adverse public health effects. To be eligible for a deviation from the accurate flow indicator requirement, the applicant must submit to the department as part of its application a plan that describes the alternative method that accurately measures the water volume exchange turn-over rate.

(b) Each pool must have an inline thermometer installed to monitor the temperature of the pool. The department may allow a deviation from the use of an inline thermometer by an applicant who can demonstrate in a written application to the department that the water temperature can be accurately measured by an alternative method in lieu of an inline thermometer and that the deviation does not have the potential to cause adverse public health effects. To be eligible for a deviation from the inline thermometer requirement, the applicant must submit to the department as part of its application a plan that describes the alternative method that accurately measures the water temperature.

(c) Upon request by the department, the pool operator must collect water samples for bacteriological or other testing for public health investigations or when the turnover rate is greater than 8 hours, the provisions of (3)(c)(i) below are not met, or the pool is a flow-through hot springs pool that does not utilize the alternative of chemical disinfection but has not been drained, cleaned, and sanitized every 72 hours.

(d) Each pool must be maintained to prevent corrosion, algae growth and other mineral accumulation on the pool walls,

floor and equipment. Hot water mineral pools are particularly subject to such conditions.

(3) Every flow-through hot springs pool must comply with the following:

(a) Each such pool must comply with the provisions of ARM 16.10.1503 through 16.10.1507; 16.10.1510 through 16.10.1511; 16.10.1515; 16.10.1517(1) and (3); 16.10.1518(1); 16.10.1519 through 16.10.1520; 16.10.1521(2); 16.10.1522(1), (2), (6), (7), and (9); 16.10.1523 through 16.10.1526; and 16.10.1528 through 16.10.1531.

(b) The temperature of a pool or spa used primarily for soaking may not exceed 106° F, and the temperature of a pool used primarily for swimming may not exceed 100° F. Water temperature must be monitored and recorded in accordance with ARM 16.10.1523.

(c) As required by 50-53-115, MCA, each flow-through hot springs pool must either be drained, cleaned, and sanitized every 72 hours, along with all surfaces that flow into the pool, or the pool must be disinfected with a chlorine or bromine residual. The following requirements apply to each alternative:

(i) If the pool and the surfaces flowing into it are drained, cleaned, and sanitized every 72 hours, records of the cleanings must be maintained in accordance with ARM 16.10.1523; or

(ii) If the pool is disinfected, a chlorine residual of 1 to 5 ppm (3-5 ppm is recommended) or a bromine residual of 3 to 6 ppm must be maintained in the pool at all times. In addition, the pool must comply with the provisions of ARM 16.10.1513, 16.10.1514, and 16.10.1518.

(d) If, as allowed by 50-53-115, MCA, the pool is not chemically disinfected, a sign must be conspicuously posted at poolside that states the following in the same words or words of substantially the same meaning: "State law does not require chemical disinfection of this pool (or spa) if it is completely drained and sanitized every 72 hours. No one with disease communicable by water is allowed in the pool".

(e) The pH of the pool water must be maintained at no less than 7.2 and no greater than 8.5.

(f) A flow-through hot springs pool may submit to the department in writing a standard operating plan which proposes how that operation plans to meet the standards of ARM 16.10.1527(3) using an alternative method or methods. The applicant must demonstrate in the standard operating plan that the standards can be achieved and that the plan does not have the potential to cause adverse public health effects. The standard operating plan is not effective until the department approves the written standard operating plan in writing. A copy of the approved standard operating plan must be kept on the pool premises and be available for review and verification during pool or spa inspections.

(4) Discharge of pool waste water may be subject to the provisions of the Montana Pollutant Discharge Elimination System (MPDES), ARM Title 17, chapter 30, subchapter 12. Persons whose discharges of pool waste water are subject to MPDES shall comply with ARM 16.20.901, et seq. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107 and 50-53-115, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1528 WADING POOLS (1) Wading pools for children shall be physically separated from swimming pools by means of at least a 4-foot fence or barrier.

(2) A fence or barrier shall be provided on the outside of the deck area of all outdoor wading pools.

(3) Wading pools shall have a maximum water depth of 24 inches. The water depth at the perimeter shall not exceed 18 inches.

(4) Wading pools must:

(a) be connected to the pool, recirculation, disinfection system, or

(b) have a recirculation, disinfection system of its own capable of a one hour turnover rate, or

(c) operate as a flow-through system with a 1 hour turnover rate.

(5) Floors of wading pools shall be uniform slip-resistant finish, sloped to drain completely with a maximum slope of one foot in 12 feet.

(6) The water in all wading pools shall be kept sufficiently clear so that the bottom of the wading pool is visible at all times. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1529 INSPECTIONS (1) The regulatory authority, after showing proper identification, shall be permitted to enter any swimming pool or spa at any reasonable time for the purpose of making inspections to determine compliance with the requirement of this subchapter. The agent shall be permitted to examine any records pertaining to the operation, maintenance or personnel employed at the pool or spa, and to collect such samples of water as necessary to determine that every public swimming pool or spa complies with the requirements of this subchapter.

(2) Whenever an inspection of a swimming pool or spa is made, the findings shall be recorded on an inspection form provided or authorized by the department. The inspection form shall summarize the requirements of this subchapter. If one or more violations are determined to exist, the inspectional remarks shall be marked to reference the violations and shall specify the correction to be made and the date by which the correction is to be made. A copy of the completed inspection report form shall be furnished to the person in charge of the swimming pool or spa at the conclusion of the inspection. The completed inspection form is a public document that shall be available for public review or distribution upon payment of copying cost to any person on request.

(3) A full facility inspection requires an inspection for compliance with all the requirements of this subchapter.

(4) A critical point inspection requires an inspection for compliance with 50-53-107, MCA, and ARM 16.10.1513, 16.10.1519(2), 16.10.1522, and 16.10.1525. In addition, inspection for the requirements of ARM 16.10.1527 is required if the pool is a flow-through hot springs pool. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-103, 50-53-106, 50-53-107, 50-53-209, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85; AMD, 1994 MAR p. 1998, Eff. 7/22/94; AMD, 1996 MAR p. 1505, Eff. 6/7/96.)

16.10.1530 MISCELLANEOUS (1) No food or drink shall be consumed or served in the area restricted to swimmers or bathers.

(2) No animals or fowl shall be permitted in the area restricted to swimmers or bathers.

(3) A means of contacting emergency medical services shall be provided on the premises. Instructions regarding emergency calls shall be prominently posted. (History: Sec. 50-53-103, MCA; IMP, Sec. 50-53-107, MCA; NEW, 1985 MAR p. 782, Eff. 6/28/85.)

16.10.1531 MINIMUM PERFORMANCE REQUIREMENTS FOR LOCAL HEALTH AUTHORITIES (1) To qualify for reimbursement under 50-53-218, MCA, the local board of health must either enter into a written, signed cooperative agreement with the department that establishes the duties and responsibilities of the local board of health and the department consistent with this subchapter, or meet each of the following requirements:

(a) At least one sanitarian working with or for the local board of health must receive training from the department in swimming pool inspection techniques. The department is responsible for making training available on a periodic basis.

(b) The local board of health must ensure that the following are done by the local health officer, sanitarian, or sanitarian-in-training:

(i) Upon notification by the department, a prelicensing inspection is made pursuant to ARM 16.10.1503 to determine compliance with the requirements of this subchapter.

(ii) Each swimming pool or spa within the jurisdiction of the local board of health that is available for use year-round is inspected at least once every 6 months, and each swimming pool or spa that is available only for seasonable use, at least once every 12 months.

(iii) Quarterly inspection reports are submitted to the department within 10 days following the close of each quarter of the fiscal year (1st quarter--September 30; 2nd quarter--December 31; 3rd quarter--March 31; 4th quarter--June 30) on forms approved by the department.

(iv) All documentation of enforcement of this subchapter, including but not limited to inspection reports, consumer complaints, illness investigations, plans of correction, and enforcement actions, is retained for 5 years and

copies of the documentation are submitted or otherwise made available to the department upon request.

(2) A failure by the local board of health to meet all of its responsibilities under the cooperative agreement or under (1)(a) and (b) above shall result in the withholding of funds from the local board reimbursement fund in an amount to be determined by the department. (History: Sec. 50-53-103, 50-53-218, MCA; IMP, Sec. 50-53-103, 50-53-218, MCA; NEW, 1994 MAR p. 2941, Eff. 11/11/94.)

